

CONCORDIA UNIVERSITY

Council of the Faculty of Engineering and Computer Science

Minutes of Meeting 98-2

Held

Friday, 20 March, 1998 at 2:00 p.m. in H-769

Present: Dr. N. Esmail (Chair); Dr. S.T. Alkass; Dr. A. Athienitis;
Dr. J.W. Atwood; Dr. R. Bhat; Ms. C. Chan; Dr. T. Fancott;
Dr. D.J. Ford; Dr. C. Giguère; Dr. G. Gouw; Mr. R. Gupta;
Dr. A.M. Hanna; Dr. L. Harris; Dr. J. Hayes; Mr. D. Hinton;
Dr. J. Jans; Dr. C. Lam; Ms. A. Lappos; Dr. H.F. Li;
Dr. O. Moselhi; Ms. R. Penekelapati; Dr. E.I. Plotkin;
Dr. S. Rakheja; Dr. T. Stathopoulos; Dr. J. Svoboda; Dr. G. Vatisas

Regrets: Dr. F. Haghighat; Dr. V.S. Hoa; Dr. J. Narain; Dr. C. Trueman

Guests: Dr. A.S. Ramamurthy; Dr. Osman; Dr. H. Attia

1. Adoption of Agenda

Motion 98-02-01 The agenda was unanimously adopted (J. Hayes, A.M. Hanna)

2. Adoption of Minutes

Motion 98-02-02 The Minutes of Meeting 98-1 (20 February 1998) were unanimously adopted (E.I. Plotkin, C. Lam).

3. Chair's Remarks

The Chair expressed his gratitude for the Council's assertion that the Intelligent Building was the highest priority for the Faculty. In a subsequent meeting with Dr. Lowy and Dr. Taddeo, the administration of the University expressed its support for the Council's motion.

The Chair informed the Council that last week he had a meeting with the Capital Campaign group and it was agreed that a list of all the components of the building would be established. The Capital Campaign group is ready to fund raise for the building with the assistance of the Faculty. In the last Executive meeting, assignments were distributed and all departments will be involved in this fund raising effort.

Concerning space occupancy in the new building, the Chair spoke of a minimal and an optimal scenario. The minimal scenario would include the School for Building and the Computer Science Department in the new space. The optimal scenario would accommodate the entire Faculty of Engineering and Computer Science. The determinant is the amount of money raised. At present the Faculty has approximately 20 million from capitalization of rentals and if this amount could be increased to 35 million, the optimal scenario may be feasible. It is hoped that 4 million will be received from CFI. A delegation will be sent to meet with Mme Marois to solicit funds for the Software Engineering Program and the new building as soon as Senate clears the Software Engineering program in May. It is also hoped that funds will be forthcoming from the Federal Government Infrastructure Program.

The Chair informed the Council that the Capital Campaign is very receptive to the needs of the Faculty and is waiting for a *menu* of items needed to direct them in their fund raising effort. This menu must be ready for next week and the Dean has asked the department Chairs for recommendations on items needed for the Software Engineering Labs and for other components of the Building.

The Chair reiterated that the stand taken by this Council with regards to the Building helped stem an unfavourable tide against this project and that efforts are now focused in the right direction.

The Chair stated that the Software Engineering Program is an essential component of the project. The timing of this project is essential. If the Faculty can have the Software Engineering Program approved by Senate in May, Concordia will be the first university in Montreal and in Quebec to offer such a program. This will be a major advantage to the people canvassing industry for funds through the Capital Campaign. Contacts with companies such as CAE indicate that there is a great need for such a program and that they are willing to work with the Faculty in the development of such a program. The Chair has asserted that his goal is to have Concordia be the first university to offer such a program in Quebec.

The Chair emphasized that even in the minimal scenario all departments will benefit from this project and that no department will be left out.

The Chair introduced a document received from Mme Marois entitled "L'Université devant l'avenir". The Minister is soliciting a response from the University to this document. She will be visiting Concordia in September to discuss this document and the Chair has made sure that part of her visit will include an exposure to the Software Engineering Program to show the Minister that the Faculty of Engineering is responding to the needs of the people and industry of Quebec.

Dr. Giguère added some clarifications to the *minimal* and *optimal* scenarios. He stated that the minimal scenario has two principles, which are – (1) to vacate all rented space and (2) that no academic unit will occupy more than two buildings. The optimal scenario envisages the entire faculty housed in one building with the exception of the laboratories in the Hall Building.

4.

American Society of Mechanical Engineers Awards

The Chair presented Fellowship awards from ASME to Dr. Subhash Rakheja and Dr. Helmi Attia in recognition of achievements in their fields of study. He stated that this honour reflected well on the Faculty and the University and congratulated the recipients of these awards.

5.

Software Engineering Program

Dr. Fancott stated that very good progress is being made. Topics and course sequence has been established as well as definition of course content. The program dossiers will be prepared shortly.

Dr. Lam emphasized that the whole department is involved and working at maximum speed. The core curriculum has been decided. The program will be made up of 120 credits of which between 15 to 24 credits will be available for specialization in particular disciplines.

Dr. Lam stated that the program would incorporate existing courses as well as ideas from industry and other universities.

Dr. Lam gave the following outline for “Timeline”:

- (1) On March 27th, the department will hold a meeting to approve the program in principle
- (2) Subsequently the program will be presented to the Undergraduate Studies Committee at their next meeting
- (3) A period of discussion will follow to be completed by April 24th or earlier if possible

Dr. Moselhi stated that he was very pleased with the idea of a core program allowing for the incorporation of other disciplines. He said that this was very important for the Mechanical and School for Building Departments. He stated that this would benefit the departments and would help the growth in enrollment and recruitment. Dr. Moselhi suggested that the various departments work in parallel with the Software Engineering group (CSD and ECE) and welcomed a draft of their proposal so that feedback may be accelerated.

The Chair stated that he views the Software Engineering Program as an independent discipline, which combines the applications of Computer Science to Engineering. The objective of this program is to create an Engineer whose principal program knowledge is software. The Chair stated that he is in complete agreement with the idea of combined degrees. He stressed however, the importance of maintaining accessibility to this program for the other departments of the Faculty. He also stated that a combined degree may require more than four years of study.

Dr. Jans pointed out to the Council that before the Software Engineering Program can be presented to the Senate in May for approval, it must go through the APC. The next APC meeting is scheduled for April 14th and any items to be added to the Agenda must be in by April 3rd.

Dr. Hayes suggested that Dr. Fancott attend the next ECE department meeting to bring the department up to date on what is happening in the CSD and on the prognosis for bringing the program to Senate.

Dr. Fancott accepted the invitation.

Dr. Fancott stated that he agrees with the idea of combined degrees and stressed that at Concordia it would streamline the present process of completing a second degree with 60 credits. He pointed out that additional resources would be required.

Dr. Fancott said that he was aware of the April 14th, APC meeting and that he would speak to Catherine MacKenzie about the possibility of adding another meeting to the schedule. He stressed however, that every effort would be made to meet the timeline.

Dr. Giguère stated that the concept of software engineering is becoming more crystallized in people's minds. He sees a distinct difference between software engineering and computer engineering and he concludes that it may be better to have the Software Engineering Program housed in one department, that of Computer Science. He stressed however that due to the huge overlap that the two departments would have to establish mechanisms for curriculum and research issues.

The Chair stressed the importance of the timeline and of having the Senate approve the program in May. Failure to have the program approved in May would adversely affect the fund raising campaign and the scheduled meeting of the Dean with Mme. Marois. The Chair emphasized that the meeting with Mme Marois is important not just for fund raising but to discuss the cost and financing of the Software Engineering Program. He stated that a curriculum must be ready and that the target for student admission to the program is January 1999. He stated that in the event that

the program has not been approved it would be offered as an option in Computer Science.

Dr. Giguère stated that the reason for meeting Mme Marois is to solicit her support for the acceleration of the approval process for the program by CREPUQ.

Dr. Hayes expressed his agreement with Dr. Giguère that the program reside in one department. He stressed the importance of consultation between the two departments.

Dr. Lam said that he would be glad to give a copy of the draft curriculum to Dr. Moselhi. He also mentioned that the department has a web site for this project and that he would provide the web site address to the Chairs.

Dr. Fancott pointed out that one of the considerations for accreditation of a program is the number of professors who are registered engineers with the O.I.Q. He informed everyone that the Computer Science Department is enthusiastically filling applications and challenged other departments to do the same. He has a large number of applications available.

The Chair said that in order to assist the professors who are applying to the O.I.Q. the Faculty has set up a "fast-track" French language program to be offered for three hours daily during the month of June. This program is opened to all interested faculty members.

6. Graduate Slot Courses (ECGSC 98-1M)

Motion
98-02-03

The Council of the Faculty of Engineering and Computer Science approves that course ELEC 690 be offered as a slot course for the summer term. (G. Vatisas, C. Giguère)

Vote: carried unanimously

Dr. Hanna asked if this slot course is a replacement for another course or if it is a duplication of other courses.

Dr. Giguère replied that all graduate courses are being re-examined with the idea of targeting courses in certificate areas. He stated that the other goal of the re-examination is to distinguish courses offered for professional engineers from those offered to graduate students.

Dr. Hayes concurred with Dr. Giguère and said that this course is a trial course for the revised graduate curriculum.

Dr. Stathopoulos pointed out that the course description must be changed before it can be offered as a permanent course.

7.

Other

The Chair invited the department Chairs to give a brief summary of events in their department.

Dr. Giguère spoke about the CFI and putting together a Research Plan for the University and the Faculty. A draft proposal for the Faculty under the title of Information Technologies involves the collaboration of the four departments as well as specific areas for Building Studies and Mechanical Engineering. He will distribute a copy of this proposal to the Chairs for comments. The final proposal must be ready for April 1st. Another proposal under New Innovations will involve new faculty members only. The department is also working on Graduate Certificate programs.

Dr. Moselhi identified five items of importance to his department.

- (a) The Intelligent Building – the department has formulated two memos, which discuss what is intelligent and the intelligent features of the building. Five main labs have been identified and the main task at hand is the CFI application for the new Intelligent Building.
- (b) Curriculum development – the department is working on the building engineering and design component courses. It is hoped that next year the curriculum will be re-engineered to maximize the benefits of the merger and identify areas of opportunity.
- (c) Graduate Certificate in Environmental Engineering – it is hoped that all the deadlines will be met to establish this program with particular emphasis in Industrial Waste Management. He also mentioned that the department has received one million dollars from the Capital Campaign for environmental engineering.
- (d) Space consolidation – with the merger of the two departments space consolidation and the uniformity of procedures are priorities.
- (e) Bridge Competition – the 14th Annual Bridge competition was a major success and it received good publicity.
- (f) Recruitment – it is hoped that the Software Engineering Program will help the department with recruitment.

Dr. Lam stated that Computer Science has been focusing on the development of the Software Engineering Program. A draft of the Software Engineering curriculum was presented to the EAB working group, which they supported enthusiastically. Dr. Lam also asked this group for teaching support for this program. The demand for courses offered by CSD remains high and the department is struggling to find qualified instructors.

Mr. Hinton thanked the Faculty and the School for Building for their financial contribution and organizational support in the bridge building competition. He thanked the students who contributed to the equipment fund and the students from the Civil Society who put on one of the best bridge building competitions. Mr. Hinton reported that students from 28 different schools from across North America participated in this competition. Elections for next year's Council will be held from March 24th to 26th. The deadline for the Engineering and Computer Science Student Life Awards is March 20th and the Honorary Ceremonies will be held on March 31st.

Ms. Penekelapati suggested to the Council that the Faculty offer a program in Industrial Engineering at the graduate level.

The Chair informed the Council that he has received a request from the Centre for Mature Students to have a representative on the Council. This will be discussed in the next Council meeting.

8.

Adjournment

The meeting was adjourned at 3:40 p.m.